Alternative Feedstuffs and Changing Coproducts for Cowherd

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Introduction

The combination of decreasing acres available for crop production, an increasing world population, increased utilization of grain for fuel and increased input costs (fuel, transportation, and fertilizer) have resulted in limited feed supplies and higher feed costs. Additionally, the recent drought in much of the United States has further reduced the available feed supply driving feed costs dramatically higher. Historically, feed costs have represented 50-70% of the cost of production for beef enterprises. This past year, the high prices for corn and hay have driven that percentage over 80% for many operations. Cow-calf producers have been forced to investigate alternative feedstuffs to lower the cost of production. Ideally, the cowherd is grazing a significant portion of the year. Grazing days varies drastically throughout different regions of the United States and is greatly impacted by year to year differences in weather patterns. Drought limits summer grazing. Snow and ice can limit winter grazing. Harvested and stored feeds represent the majority of feed costs for cow-calf producers. With hay supplies low and hay costs high, producers need to consider alternative feeds for winter feeding and for emergency drought relief.

Alternative Feedstuff Considerations

Fortunately, beef cow-calf producers have options. Many alternative feeds can meet the needs of beef cows. Producers need to consider: nutrient composition, availability and consistency, storage and feeding, effects on performance, and cost. Available feedstuffs will vary from region to region, but many will meet the needs of the cowherd if all criteria are properly considered.

Nutrient Composition

It is critical to match the feed resources to the needs of the cows. Unfortunately, many producers don't know the information necessary to do this. It is critical to have feeds analyzed. If you do not know the nutrient composition of a feedstuff, is impossible to know if you are adequately meeting the needs of your cowherd. The second part of the equation is knowing the needs of your cowherd. How much do your cows weigh? What is the breed composition? What stage of production are they in? A 1600 lb Simmental cow nursing a 2-month old calf will have a much different requirement than a 1100 lb Hereford cow that is in mid-gestation and is not nursing a calf. Some alternative feedstuffs have different supplement considerations. If you are feeding high levels of corn coproducts, you will want to make sure you have adequate calcium in your mineral supplement to balance the calcium : phosphorous ratio.

Availability and Consistency

It is important to know the availability of the feedstuff you are considering. Is there a steady supply or is it seasonal? Depending on your herd size, you may not be able to get adequate supply of a feedstuff. Some producers are equipped and willing to adapt and change to fluctuations in supplies of products. Other producers do not want to hassle with the uncertainty. Producers also need to consider the consistency of the product. Many of the coproducts vary in composition from plant to plant. A nutrient analysis on a product in Illinois may not do you much good if you are getting the product from a plant in Nebraska. Ethanol plants have worked hard to improve the consistency of their products, but variation still occurs from plant to plant and even within plant. This is another reason why it is essential to analyze the feedstuffs you have on inventory.

Storage Considerations

Storage and handling of the products must be considered. Most producers are set up to store hay and grain. If the alternative feedstuffs require storage and handling equipment beyond the needs for hay and grain, then there will be additional costs. Herd size often is an important factor when considering alternative storage and handling equipment. Larger herds can more easily afford equipment and can more quickly utilize wet or perishable feedstuffs. Smaller herds will be more limited on feedstuffs that can be utilized.

Performance of Cattle

For many producers, the true test of an alternative feedstuff is the evaluation of the performance of the cattle. If cattle fed alternative feedstuffs perform similarly to cattle that are fed traditional feedstuffs, producers become confident in the product. Many studies have been conducted evaluating the use of alternative feedstuffs in both gestating and lactating cow diets. When nutrient requirements of the cows are met, many combinations of alternative feedstuffs have proven to be effective. Studies have evaluated effects on cow body weight and body condition score, calf birth weight, milk production, weaning weight, reproduction, and even subsequent calf growth and carcass traits. Feedstuffs vary from region, but if nutrient requirements are met cow performance is not compromised.

Cost

When all other criteria have been considered, the real deciding factor is cost. However, it is not always that easy to compare costs. It is important that you are comparing “apples to apples”. The dry matter of alternative feedstuffs will vary greatly and thus it is important to compare costs on a dry matter basis. Don’t forget to consider additional costs associated with trucking, storing, and feeding the various products. Beef cow-calf producers that identify low-cost alternative feedstuffs will greatly improve profitability.

Changing Coproducts

The ethanol industry is continually changing; thus, the resulting coproducts are continually changing. Currently, the trend appears to be to pull additional fat out of distillers grains. Although this will result in a lower energy product, this should not greatly impact distillers grains use in the cowherd. As the refining process changes and coproducts evolve, producers will need to continually evaluate the nutrient analysis of the coproducts and modify feeding strategies / supplements as necessary.

Summary

Limited feed supplies and high feed costs have caused beef cow-calf producers to consider alternative feedstuffs. Feed costs represent at least 60% of the costs associated with beef production. Stored or purchased feed represents the majority of these feed costs. There are many alternative feedstuffs available, and they vary greatly from region to region. Producers must consider the nutrient composition of the feedstuff, availability and consistency of product, storage and feeding equipment, performance of cattle and ultimately the cost of the product. As the ethanol industry evolves, corn coproducts continue to change. Thus far, changes in coproducts have had minimal impacts on the cow-calf producer. Producers that identify opportunities to utilize low-cost alternative feedstuffs and coproducts will likely be the most profitable.